

On a Human Scale

Isotretinoin and one patient's teary eyes: "please listen or I'll cry"

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Introduction

There is an apocryphal saying, If you listen to the patient long enough, he will tell you what the problem is. But, sadly, who is listening? Physicians relearn this lesson with regularity, and recently it was driven home to me again. The patient is a 56-year-old man with a painful acneiform eruption mostly on his back. His work-up did not show any contributing illness. Therapy was initiated with doxycycline, but he developed dental staining and so was switched to isotretinoin. His eloquent patient-centered case report has many teaching points for physicians, patients, and other caregivers. As his dermatologist, I did not initially pay close enough attention to his complaints, as I was unaware that he was relating poorly documented possible side effects of the isotretinoin he was taking. Let's listen to the patient...

The patient's story

For several years, I would get periodic bouts of acne on my back. When pimples occurred, they appeared in waves and caused a good deal of discomfort.

For a period of 2–3 years, my dermatologist prescribed doxycycline, which lessened the frequency and severity of acne attacks on my back but never completely eliminated the problem. The doxycycline also caused brown staining on my teeth, an unanticipated effect.

In March of 2011, I stopped taking the doxycycline (to the delight of my dental hygienist), and the dental staining disappeared. Doxycycline was replaced with isotretinoin, 30 mg daily. Immediately, I was afflicted with dry skin, dry eyes, and chapped lips – predictable side effects that stayed with me throughout the time I took it. After six months, the periodic acne on my back persisted, albeit in a much more isolated way. My dermatologist increased my dosage from 30 to 40 mg daily, which seemed to help. In January of 2012, after 10 months, I stopped taking the isotretinoin. The acne had almost completely subsided.

I recall being warned and then reading about the litany of possible risks and side effects of taking isotretinoin (in

the fog that is my memory, I actually had to sign an iPledge statement promising that I was not pregnant!). What I did not quite piece together as related was that shortly after starting on isotretinoin my eyes started to tear uncontrollably. Indoors and outside, during the day and at night, with contact lenses in my eyes and without, I was constantly wiping tears from the inside corners of my eyes, nose, and upper cheeks. It wasn't just that my eyes were watery; it was that the tears would flow down my cheeks – as if they had no other place to go.

During that spring, I got conjunctivitis, which I'd had only once before in my life. I visited my ophthalmologist, who prescribed the necessary antibiotic. A few weeks later, I had conjunctivitis again. This time I visited my primary physician, who treated me with the same antibiotic, advised me to wipe/pat my teary eyes gently with a tissue, and referred me to an ophthalmic surgeon. For the next several weeks, I carried tissues and stole napkins wherever I went and kept them on my work desk, in my pockets, at my bedside, everywhere.

By mid-summer, I was so fed up with what seemed like a worsening situation that I scheduled an appointment with the ophthalmic surgeon. I am a very reluctant patient of surgery but I was desperate. At this point, the thought had crossed my mind – despite my inability to find any proof online – that my tearing was somehow related to the isotretinoin. I noted the coincidental timing of the two to the surgeon. He was uninterested. Instead, he pointed to the scratched corner of my right eye and asked if I had injured it. Not that I can recall, I said. But the problem occurs in both eyes. After injecting fluid into my tear ducts and observing that it drained as it should, the surgeon concluded that the ducts were misshapen at the opening, not blocked, and he recommended surgery to repair them.

Before I went ahead to schedule this surgery, my primary physician called to let me know that he located some information online to suggest that isotretinoin may affect the conjunctiva and cause tearing. He recommended that I wait and see what happens when I finish my isotretinoin prescription. That turned out to be

damn good advice. When I finished up a few weeks later, the tearing stopped. The relief was immediate and total. I took my last dose of isotretinoin on a Friday; by Monday, I was substantially improved; within a week, I was back to normal. After 10 months of discomfort, it was like it never happened.

As far as I can tell, the link between isotretinoin and tearing is not to be found in the medical literature. But, the personal evidence feels awfully compelling to me and echoes what my dermatologist has been saying for years: each and every one of us is unique, a case study – an experiment of one.

Coda

It strikes me as curious that physicians author almost all case reports. How much more interesting and memorable is the story told from the patient's vantage point? This man's story has important teaching moments.

1 While he was taking doxycycline, a few years ago, he complained of dental staining. This is not a well-recognized side effect of that drug in adults. A PubMed search at the time revealed a helpful reference to doxycycline-induced dental staining in adults, and that initiated the switch to isotretinoin.¹

2 The patient mentioned his watery eyes on a couple of occasions, but I discounted this because it did not fit my data set of isotretinoin side effects. In addition, we had few options for controlling his painful back acne. However, when he stopped the drug, these symptoms quickly disappeared. I again resorted to PubMed and found another helpful article.² The explanation the authors pro-

pose is debatable, but the fact that this can occur was corroborated.

In both instances, only one pertinent reference was found. That was fortuitous. There is a bigger lesson to garner here. Patients often recount symptoms that perplex us and for which we may have no plausible explanation. In the course of our busy days, we often dismiss their complaints, and this can be to a patient's detriment.

The take-home message is just listen. Keep an open mind. Sometimes, if one is lucky, PubMed (<http://www.pubmed.gov>) will help. Even when it does not, there is still the possibility that one's patient has uncovered a truth not explained in the medical literature. Each of us is, after all, an experiment of one.

Patient-centered care is an idea whose time has come.³ I believe we should open the pages of our journals to articles by our patients. They are our true teachers and will further our understanding of the disorders they present with.

Conflicts of interest: None.

References

- 1 Ayaslioglu E, Erkek E, Oba AA, Cebeciolu E. Doxycycline-induced staining of permanent adult dentition. *Aust Dent J* 2005; 50: 273–275.
- 2 Chua WC, Martin PA, Kourt G. Watery eye: a new side-effect of isotretinoin therapy. *Eye (Lond)* 2001; 15(Pt 1): 115–116.
- 3 Barry MJ, Edgman-Levitan S. Shared decision making—pinnacle of patient-centered care. *N Engl J Med* 2012; 366: 780–781.